

# Building Slack Apps with Apex on Salesforce

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# Slack acquires Missions to help users automate work tasks inside chat



Lucas Matney @lucasmtny / 12:26 PM PDT • July 17, 2018

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As Slack continues to grow its paid business users, the company is looking for ways to help customers build integrations that make sense for the work they do.

Slack **announced today** that it has acquired **Robots and Pencils' Missions**, an app that allows Slack users to build tools to automate simple routines without code. Terms of the deal weren't disclosed.

Paid users are already big fans of Slack integrations. There are currently 1,500 apps available in the Slack app directory. The company says that 94 percent of users in that bracket use apps and integrations, while 65 percent of teams have built their own. Building an integration certainly isn't an easy process for non-tech teams to handle; Missions is focused on a more visual flow that ditches some of the complexity.

## First global services partners

Slack's initial set of participating partners offer a range of services, including solution design, business process optimization, change management, and end-user adoption.

Initial US partners include:

- **Robots & Pencils**—With offices throughout North America and London, Robots & Pencils helps companies build integrations on the Slack platform to drive digital innovation and collaboration across the enterprise.
- **Cprime**—This company blends Agile, Atlassian, and cloud expertise to help teams define new ways to collaborate and achieve better outcomes with Slack.
- **Onix**—This company serves organizations across North America, and helps organizations change the way they work using the Slack platform.

“Because the adoption of Slack is so high among end users, introducing Slack into a company's toolset opens up the opportunity to roll out new processes,” a Slack representative noted. “Our initial set of participating partners offer a broad range of services, including solution design, business process optimization, change management and end-user adoption.”

Slack provides a single place for messaging, tools and files, to save time and collaborate with each other. Within the Slack system there are sites, channels and direct messages. “Channels” can be divided up by team, project, client or anything else relevant to your organization, “team members” can join and leave channels as needed, unlike lengthy email chains. “Threads” keep side conversations from derailing the topic or project at hand.

## ***Salesforce to Acquire Slack for \$27.7 Billion***

The move caps an acquisitive streak by Salesforce and ends Slack's run as an independent publicly traded company.

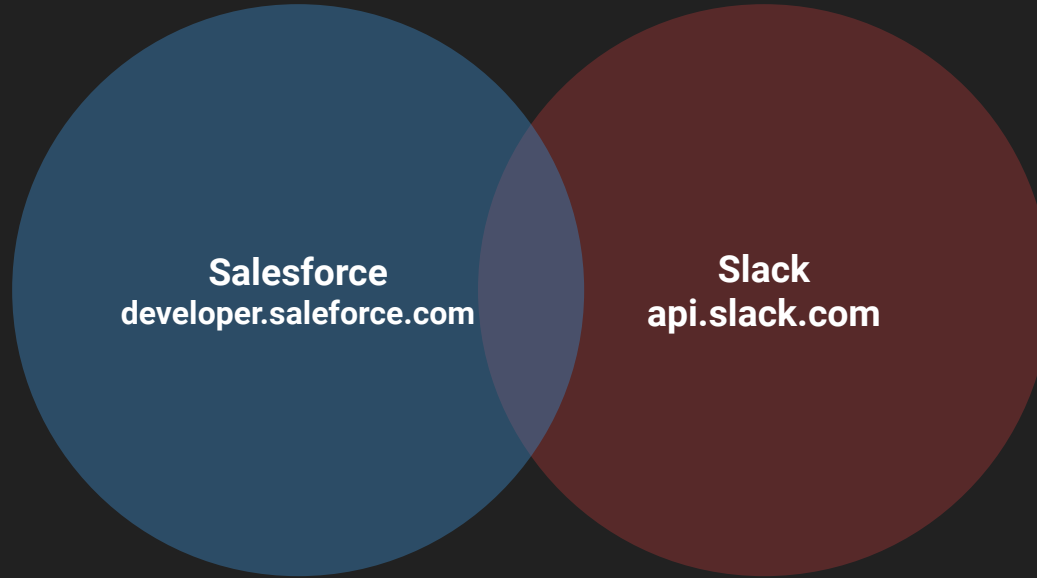


Stewart Butterfield, Slack's chief executive, at the company's headquarters in 2017. Slack has faced competitive pressure from Microsoft. Carlos Chavarria for The New York

**Salesforce is a good  
platform for building many  
Slack apps on.**

**Make Slack development  
familiar using concepts you  
already know.**

# Transferable skills



# Differences

- Salesforce has a database and Apex, as well as APIs.
- Slack just has APIs.



# Similarities

- Slack Web API / Salesforce REST API
- Slack bots / Service Account in Salesforce (integration user)
- Slack Events API / Salesforce Platform events
- Workspace / Dev org
- Global, message shortcuts / Global quick actions, object quick actions
- Block Kit / Lightning Base Components

# Slack APIs for Salesforce

- ❌ RTM API (WebSocket, older, doesn't support some of the new rich features)
- ❌ Socket Mode (WebSocket for Web API / Interactivity)
- Slack Incoming Webhooks (old school, simple)
- ✅ Events API over HTTP (Slack calls your endpoint)
- ✅ Slack Web API

# Surfaces (ways your app can present to the user)

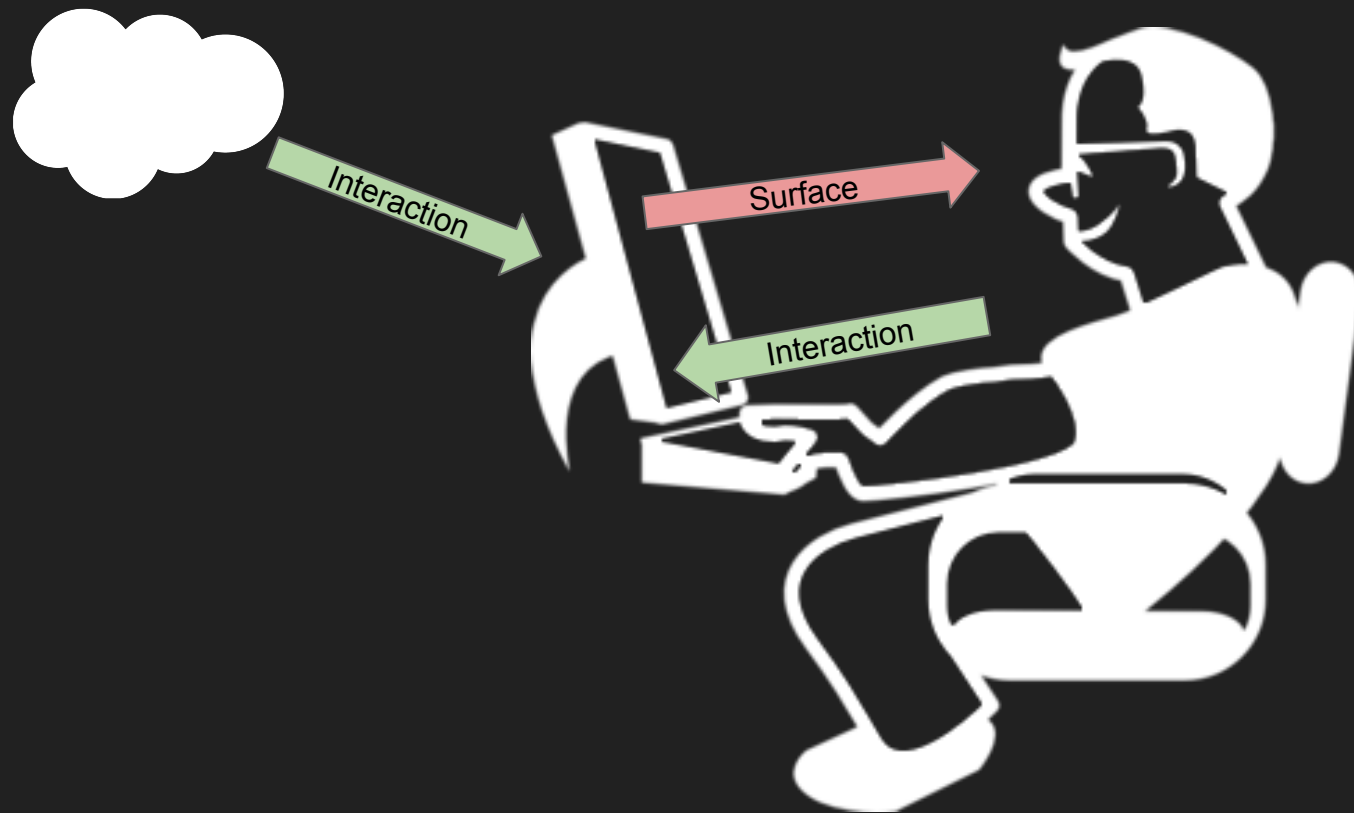
- App Home Tab
- Modals (Block Kit)
- Messages (text or Block Kit)

# Interactivity (ways systems and users interact with the app)

- Machine
  - Scheduled job
  - API push
- Human
  - Shortcuts (Global or message)
  - Slash commands
  - Block Kit button click

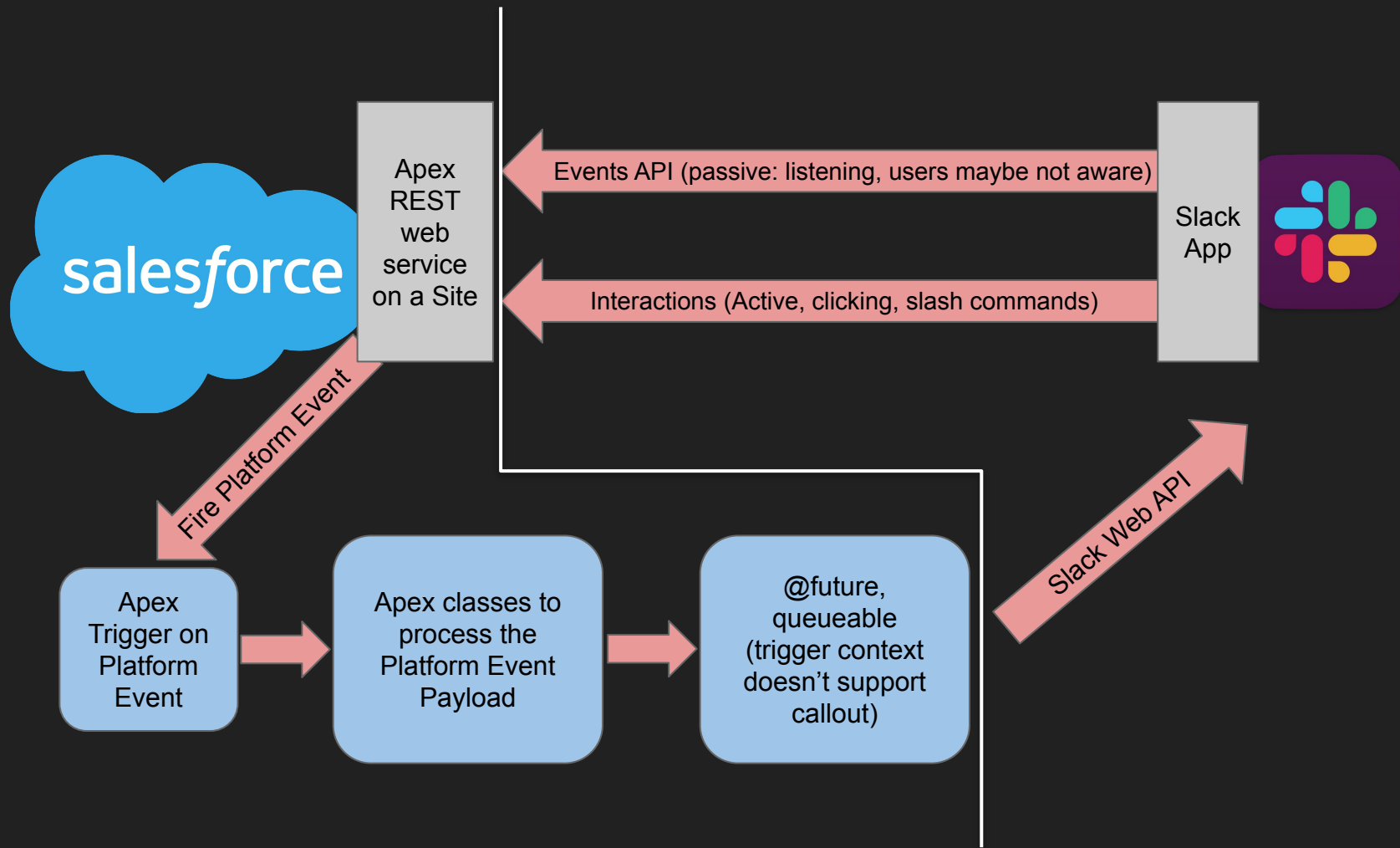
# Slack Events

- Passive way to do things similar to Interactivity.
- New user joins a channel
- User deletes a message
- User adds emoji reaction
- User sends a message



# Security

- Think of endpoint URLs like password. Long and strong. We get 2 or 3 chances with a URL!
- Token verification or signature verification
- Grant proper guest access to platform events and Apex Classes





**Demo**

# Salesforce is building this

## Salesforce Slack SDK

- Foyer Proxy (Auth, User Mapping, Org Routing)
- UISF (UI Services Framework). Block kit generator.

**Thank you!**

**<https://github.com/danieljpeter/SlackSalesforceApex>**

**@danieljpeter**